# DDI-3

## DataPort Accessory Card

## INSTALLATION GUIDE

*TD-000118-00*
*Rev. B*

# Instructions for the DDI-3 DataPort Accessory Card

## I. INTRODUCTION

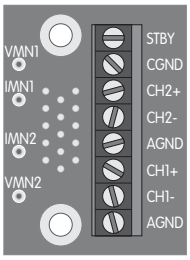


***Figure 1. The DDI-3***

The DDI-3 DataPort Accessory Card converts a QSC amplifier's DataPort to an eight-position terminal block, providing convenient access to the pins of the amplifier's DataPort; this is useful for connecting input signals or implementing a remote on/off (standby) system without using a DataPort cable. Four solder pads provide access to the amplifier's output voltage and current monitors.

QSC ISA, CX, DCA, SRA, PowerLight, and PowerLight 2 Series amplifiers feature a DataPort for every two audio channels. Therefore, one- and two-channel models have one DataPort, while four-channel models have two and eight-channel models have four. On the four- and eight-channel CX and DCA models, only the DataPort for channels 1 and 2 has the power supply standby feature. ISA models do not have power supply standby or output voltage and current monitoring.

### ON/OFF CONTROL

A TTL-type logic *low* at DataPort pin 2, such as a short to ground (Figure 2), puts the power supply in standby. Opening the short will restart the power supply, with no inrush current surge. The DDI-3 now has an isolation diode to allow the control of multiple amplifiers with a single switch (Figure 3).

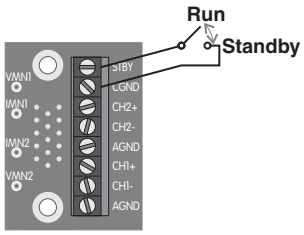


***Figure 2. On/off control of a single amplifier***

### INPUTS

Through its DataPort, an amplifier's input sensitivity (the input voltage required to reach full rated output power) is approximately 3 volts RMS, at full gain and with an 8Ω load on each channel. Use the **+** and **-** terminals for balanced connections; the **AGND** terminal is audio ground, for conecting a cable shield when necessary. For unbalanced connections, connect the signal conductor to the **+** terminal and the cable shield to both the **AGND** and **-** terminals.

### OUTPUT MONITORS

There is a VMON and an IMON output for each amplifier channel. The VMON output is a sample of the amplifier channel's output voltage, scaled so that full output into an 8Ω load equals approximately 3 volts RMS. The IMON output is a voltage proportional to and in phase with the amplifier channel's output current; the scaling varies among the various amplifier models; contact QSC for details if you wish to use this feature.

### USAGE WITH DCM, CM16A, BASIS, AND QSControl.net

To maintain power on/off functionality when using a DDI-3 on the DataPort of a DCM, CM16a, Basis, or QSControl.net product, solder a wire jumper across the diode located on the same side of the circuit board that the HD15 connector is mounted. This does not apply to DDI-3 interfaces mounted on amplifiers or on amplifier-mounted accessories.

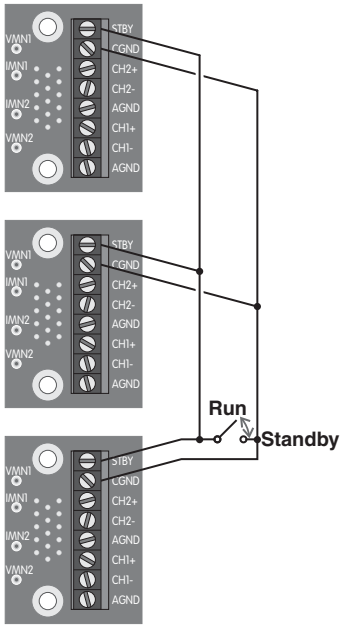


***Figure 3. On/off control of several amplfiers with a single switch***

## II. INSTALLATION

The DDI-3 kit (QSC part # SG-000235-00) includes these items:

**DDI-3 board**
**Two #4-40 × ¼" black screws**
**Installation guide**

Use this procedure to install the DDI-3:

1. Turn off the amplifier.
2. If you are using the output voltage or current monitoring features, solder the wires to the appropriate pads on the DDI-3 before attaching it to the amplifier.
3. Plug the DDI-3 into the amplifier's DataPort. Use the two screws included to secure it; do not overtighten them.

4. To attach a wire to the DDI-3, strip about 5 mm (0.2") of insulation from the wire. Twist the exposed wire strands together and make sure there are no stray ones. Turn the screw on the terminal counterclockwise until you can fully insert the wire end into the terminal. Turn the screw clockwise until the terminal clamps the wire securely. Repeat for all the wires needed.
5. The amplifier is ready for use.

# III. WARRANTY AND DISCLAIMERS

**QSC Audio Products, Inc.** is not liable for any damage to speakers, amplifiers, or any other equipment that is caused by negligence or improper installation and/or use of the DDI-3 DataPort Accessory Card.

## PRODUCT WARRANTY

QSC Audio Products, Inc. ("QSC") guarantees its products to be free from defective material and / or workmanship for a period of three (3) years from date of sale, and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use - provided the unit is returned to our factory or one of our authorized service stations via pre-paid transportation with a copy of proof of purchase (i.e., sales receipt). This warranty provides that the examination of the return product must indicate, in our judgment, a manufacturing defect. This warranty does not extend to any product which has been subjected to misuse, neglect, accident, improper installation, or where the date code has been removed or defaced. QSC shall not be liable for incidental and/or consequential damages. This warranty gives you specific legal rights. This limited warranty is freely transferable during the term of the warranty period.

The customer may have additional rights, which vary from state to state.

In the event that this product was manufactured for export and sale outside of the United States or its territories, then this limited warranty shall not apply. Removal of the serial number on this product, or purchase of this product from an unauthorized dealer, will void this limited warranty.

Contact us at 1-800-854-4079 or +1 (714) 957-7150, or visit our Web site at **www.qscaudio.com**

## TECHNICAL ASSISTANCE

If you suspect that your DDI-3 is defective, check your system configuration and DDI-3 connections to determine the origin of the problem. In many cases, incorrect audio interfacing, poor cabling, or other system level impairments are the causes of problems in audio systems. For technical assistance beyond the information given in this manual, contact the QSC Technical Services department.

## FACTORY SERVICE

If your DDI-3 ever requires factory service, contact the QSC Technical Services department for return instructions and a Return Authorization (RA) number. QSC is not responsible for products returned without a Return Authorization number.

## PRODUCT RETURN GUIDELINES

1. Pack the product securely for protection during shipment. QSC will provide factory packaging free of charge, on request.
2. Include a copy of the sales receipt, your name, return address, phone number, and a description of the problem.
3. Call QSC Technical Services department for a Return Authorization number.
4. Write the Return Authorization number on the outside of the shipping package.
5. Ship the product prepaid to QSC Audio Products.

**Shipping address:**

**QSC Technical Services**
1665 MacArthur Blvd.
Costa Mesa, CA 92626 USA

**Telephone:** 1-800 QSC AUDIO [1-800-772-2834] (toll-free; US only)
+1 (714) 957-7150
+1 (714) 754-6175

**Fax:** +1 (714) 754-6173

**Web:** www.qscaudio.com

## QUALIFIED SERVICE CENTERS

QSC maintains a service center network for your convenience. If you choose to return your product to a local service center and need a referral, contact QSC Technical Services department. Accessories, input modules, and other peripheral QSC products must be returned to the factory for service.

## INTERNATIONAL SERVICING

For QSC products purchased outside the United States, refer service to the distributor or dealer from which the product was purchased. There are numerous service centers in many countries. Your dealer, distributor, or QSC Technical Services can refer you to a service center in your country.

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